Guide to Retirement℠

2019 Edition  Three Retirement Spending Surprises & Planning Implications

Agenda

- Three retirement spending surprises
- Lifecycle of spending
- Spending surge and spending volatility
- Action items
Spending surprises summary view

1. **Spending Curve**
   - Overall spending level declines with age on a real dollar basis

2. **Spending Surge**
   - Retirees experience a significant spending increase at retirement

3. **Spending Volatility**
   - Spending volatility persists three years into retirement

---

**Material ID: 0903c02a825452ed**

---

Changes in lifestyle

Amount of daily hours spent per activity by age

Levels of happiness and stress by age

---

Values include people who do and do not participate in the activities. Values are weighted by the age and then averaged across rolling five-year age groups. Each category includes time spent traveling to and from the activity, if applicable.


---

Spend time planning your time

Retirement offers the gift of time to do the things that matter most to you. While our happiest years may be in retirement, the transition isn’t always a walk on the beach. Knowing what activities and social connections are fulfilling prior to retiring can ease the stress often associated with this new life stage.
#1. Lifecycle of spending: median household

Median spending: Chase data with estimated categorization of checks and cash

- Travel
- Apparel & services
- Entertainment
- Other*
- Transportation
- Food & beverage
- Education
- Housing (includes mortgage)
- Health care

<table>
<thead>
<tr>
<th>Age in 2016</th>
<th>Median Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-29</td>
<td>$0</td>
</tr>
<tr>
<td>30-34</td>
<td>$10,000</td>
</tr>
<tr>
<td>35-39</td>
<td>$20,000</td>
</tr>
<tr>
<td>40-44</td>
<td>$30,000</td>
</tr>
<tr>
<td>45-49</td>
<td>$40,000</td>
</tr>
<tr>
<td>50-54</td>
<td>$50,000</td>
</tr>
<tr>
<td>55-59</td>
<td>$60,000</td>
</tr>
<tr>
<td>60-64</td>
<td>$70,000</td>
</tr>
<tr>
<td>65-69</td>
<td>$80,000</td>
</tr>
<tr>
<td>70-74</td>
<td>$90,000</td>
</tr>
<tr>
<td>75-79</td>
<td>$100,000</td>
</tr>
<tr>
<td>80-84</td>
<td>$110,000</td>
</tr>
<tr>
<td>85+</td>
<td>$120,000</td>
</tr>
</tbody>
</table>

*Other includes: gifts & donations, gambling, personal care, tax payments, insurance and uncategorized items.

Source: Total spending and all category sub-totals except checks, cash and health care costs: Chase data including Chase credit card, debit card, electronic payment, ATM withdrawal and checks transactions from January 1 – December 31, 2016; J.P. Morgan analysis. Health care costs age 65+: Employee Benefit Research Institute (EBRI) data as of December 31, 2016; SelectQuote data as of January 16, 2017; J.P. Morgan analysis. Health care costs pre-age 65 and check and cash distribution excluding health care costs after age 65: 2016 Consumer Expenditure Survey, College Educated; J.P. Morgan analysis. Information that would have allowed identification of specific customers was removed prior to the analysis.

#1. Lifecycle of spending: $1 million - $3 million in assets

Median spending: Chase data with estimated categorization of checks and cash

- Travel
- Apparel & services
- Entertainment
- Other*
- Transportation
- Food & beverage
- Education
- Housing (includes mortgage)
- Health care

<table>
<thead>
<tr>
<th>Age in 2016</th>
<th>Median Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>45-49</td>
<td>$0</td>
</tr>
<tr>
<td>50-54</td>
<td>$50,000</td>
</tr>
<tr>
<td>55-59</td>
<td>$100,000</td>
</tr>
<tr>
<td>60-64</td>
<td>$150,000</td>
</tr>
<tr>
<td>65-69</td>
<td>$200,000</td>
</tr>
<tr>
<td>70-74</td>
<td>$250,000</td>
</tr>
<tr>
<td>75-79</td>
<td>$300,000</td>
</tr>
<tr>
<td>80-84</td>
<td>$350,000</td>
</tr>
<tr>
<td>85+</td>
<td>$400,000</td>
</tr>
</tbody>
</table>

*Other includes: gifts & donations, gambling, personal care, tax payments, insurance and uncategorized items.

Source: Total spending and all category sub-totals except checks, cash and health care costs: Chase data including Chase credit card, debit card, electronic payment, ATM withdrawal and checks transactions from January 1 – December 31, 2016; J.P. Morgan analysis. Health care costs age 65+: Employee Benefit Research Institute (EBRI) data as of December 31, 2016; SelectQuote data as of January 16, 2017; J.P. Morgan analysis. Health care costs pre-age 65 and check and cash distribution excluding health care costs after age 65: 2016 Consumer Expenditure Survey, College Educated; J.P. Morgan analysis. Information that would have allowed identification of specific customers was removed prior to the analysis.
Rising annual health care costs in retirement

Traditional Medicare estimated median health care costs per person

<table>
<thead>
<tr>
<th>Age 65 (2019)</th>
<th>Age 85 (2039)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$18,180</td>
<td>$16,810</td>
</tr>
<tr>
<td>$5,160</td>
<td>$4,960</td>
</tr>
<tr>
<td>$3,780</td>
<td>$3,690</td>
</tr>
<tr>
<td>$2,060</td>
<td>$2,020</td>
</tr>
<tr>
<td>$1,200</td>
<td>$1,140</td>
</tr>
</tbody>
</table>

Notes: Age 85 estimated total median cost in 2019 is $6,776. Medigap premiums usually increase due to age, in addition to annual inflation, except for policies in the following states: AK, CT, MA, ME, MN, NY, VT, IA, AK, FL, ID and WI. If Plan G is not available, analysis includes the most comprehensive plan excluding Plan F.

Part D premiums and prescription out-of-pocket costs (may vary widely)

Part B (doctors, tests & outpatient hospital insurance)

A GROWING CONCERN
Given variation in health care cost inflation from year to year, it may be prudent to assume an annual health care inflation rate of 6.5%, which may require growth as well as current income from your portfolio in retirement.

2019 additional premium per person for Modified Adjusted Gross Incomes (MAGI) of:

<table>
<thead>
<tr>
<th>FILING SINGLE</th>
<th>MARRIED FILING JOINTLY</th>
<th>ADDITIONAL PREMIUM</th>
<th>TOTAL MEDIUM COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>$45,001 – $107,000</td>
<td>$170,001 – $214,000</td>
<td>$726</td>
<td>$5,055</td>
</tr>
<tr>
<td>107,001 – 133,500</td>
<td>214,001 – 267,000</td>
<td>2,038</td>
<td>7,168</td>
</tr>
<tr>
<td>133,501 – 160,000</td>
<td>267,001 – 320,000</td>
<td>3,217</td>
<td>8,377</td>
</tr>
<tr>
<td>160,001 – 499,999</td>
<td>320,001 – 749,999</td>
<td>4,426</td>
<td>9,586</td>
</tr>
<tr>
<td>&gt;499,999 &gt;749,999</td>
<td>&gt;749,999</td>
<td>4,829</td>
<td>9,989</td>
</tr>
</tbody>
</table>

Notes: MAGI estimated total median cost in 2019 is $6,776. Medigap premiums usually increase due to age, in addition to annual inflation, except for policies in the following states: AK, CT, MA, ME, MN, NY, VT, IA, AK, FL, ID and WI. If Plan G is not available, analysis includes the most comprehensive plan excluding Plan F.

Sources: Employee Benefit Research Institute (EBRI) as of January 18, 2019; SelectQuote as of January 18, 2019; Milliman as of January 21, 2019; CMS website as of January 18, 2019; Consumer Expenditure Survey as of January 18, 2019; J.P. Morgan analysis.

Long-term care planning

Lifetime probability of needing long-term care (LTC) services by type

<table>
<thead>
<tr>
<th>One or more types</th>
<th>Unpaid home care (family/friends)</th>
<th>Paid home care</th>
<th>Nursing Facilities</th>
<th>Assisted Living</th>
</tr>
</thead>
<tbody>
<tr>
<td>69%</td>
<td>59%</td>
<td>42%</td>
<td>35%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Lifetime distribution and duration of need for significant LTC at age 65

<table>
<thead>
<tr>
<th>0 – 90 days</th>
<th>90 days – 1 Yr</th>
<th>1 – 2 Yrs</th>
<th>2 – 5 Yrs</th>
<th>&gt;5 Yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
<td>43%</td>
<td>18%</td>
<td>15%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Notes: Top chart: Includes all types of care including managing finances, taking medications, shopping, using transportation and food preparation, as well as more significant care needs. Bottom chart: Significant care needs includes two or more activities of daily living such as eating, dressing, bathing, transferring and toileting or severe cognitive impairment. Those who meet the cognitive impairment criteria who require care for less than 60 days are included in the 90 days – 1 year category.

Average change in spending varies by asset level (age 65–95)

Average inflation-adjusted spending decreases more significantly at older ages for those with more wealth

Chase households: $1 million – $3 million in assets

- Total inflation-adjusted change in spending: 1.7%
- Lifestyle excluding health care: 1.0%

All Chase households

- Total inflation-adjusted change in spending: 2.6%
- Lifestyle excluding health care: 1.3%

1 Other includes: gifts & donations, gambling, personal care, tax payments, insurance and uncategorized items.

Historical spending inflation estimates based on BLS, Consumer Price Index, J.P. Morgan Asset Management. Data represent annual percentage increase from December 1981 through December 2016 with the exception of entertainment and education, which date back to 1993. The inflation rate for the Other category is historical CPI-E 1984 - 2016. Total spending is all category expenditures except checks, cash and health care costs. Chase data including Chase credit card, debit card, electronic payment, ATM withdrawal and check transactions from January 1 – December 31, 2016.

2. Evidence of retirement spending surge

Median spending rolling periods before and after retirement

Retirement age 60–69

Spending Before Retirement

Spending After Retirement

Median spending rolling periods before and after retirement

US Dollars

1 – 2 years before retirement

1 – 2 years after retirement

2 – 3 years before retirement

2 – 3 years after retirement

Source: Chase credit card, debit card, electronic payment, ATM withdrawal and check transactions from October 1, 2012 to December 31, 2016. Outliers in each asset group were excluded (0.1% of top spenders in each spending category). Information that would have allowed identification of specific customers was removed prior to the analysis.

J.P. Morgan Asset Management

* Other includes: gifts & donations, gambling, personal care, tax payments, insurance and uncategorized items.
#3. Most had spending volatility when adjusting to a new phase of life

Spending volatility: for each of the three years after retirement, a greater than 20% change in spending compared to the year before retirement.

Note: for those who retired age 60 – 69. Total may be more than 100% due to rounding.

Source: Chase credit card, debit card, electronic payment, ATM withdrawal and check transactions from October 1, 2012 to December 31, 2016.

Outliers in each asset group were excluded (0.1% of top spenders in each spending category). Information that would have allowed identification of specific customers was removed prior to the analysis.

Sequence of return risk – lump sum investment

Value of three portfolios with the same average return

$300,000 lump sum investment with an average return of 5.0%

Annual returns by scenario

Note: Hypothetical return scenarios are for illustrative purposes only and are not meant to represent an actual asset allocation.

GET INVESTED AND STAY INVESTED

When making a one-time long-term investment, your average annual return will determine your outcome, regardless of the sequence in which the return is experienced.
Sequence of return risk – saving for and spending in retirement

Portfolio values assuming various return sequence scenarios

The greatest risk is when wealth is greatest
When saving for retirement, the return experienced in the early years has little affect compared to growth achieved through regular savings. However, the rates of return just before and after retirement – when wealth is greatest – can have a significant impact on retirement outcomes.

For return sequence scenarios, see page 39. Hypothetical return scenarios are for illustrative purposes only and are not meant to represent an actual asset allocation. *Spending in retirement chart assumes an initial $1,000,000 and a 4% withdrawal adjusted annually for inflation of 2%.

Retirement profiles by retirement planning outcome

Align your objective with your outcome
Retirement can mean several goals for your portfolio – current income, growth, sustainable withdrawals and/or protected income. To find the right balance, your projected outcome from your retirement plan can help you identify which of these to consider making a priority for your diversified portfolio.

Increasing Wealth:
Investment return exceeds spending needs
Priority: Total return

Preserve Principal:
Spend investment return only
Income and/or appreciation
Priority: Current income

Partial drawdown:
Access both investment return and some principal
Priority: Dynamic withdrawal strategy

Total Drawdown:
Lifestyle consumes all wealth
Priority: Protected income

Summary of planning implications

- Account for spending differently in retirement
- Understand sequence of return risk
- Consider a goals-based wealth management approach
A historical view: the Silent Generation

Average spending patterns of the Silent Generation
1984-2014 adjusted for inflation to 2015 dollars

Estimates based on average consumer expenditure from the Consumer Expenditure Survey for each age group excluding pension and cash contributions, and including mortgage principal pay down in the housing category. BLS data as of September 2015.


Planning assumptions for 65-year-olds today

Projected change in spending at age 65: $1 million - $3 million in assets

Using CPI-U, annual inflation results in 36% more in estimated spending by age 95

CPI-U represents annual average between 1926 and 2016. Historical spending inflation for apparel and services represents annual average December 1981 through December 2016. LTCMA: long-term capital market assumptions. Used average spending by category.

Buy experiences not things

Why do experiences provide greater happiness over time?
- Social connectedness
- Memories improve as time goes on
- Tend to influence sense of who you are and who you want to be
- Unique opportunity that you can't easily compare with other options

Who is happier?

How happy do you feel this morning?

A: Spend on you  B: Spend on someone else

How happy do you feel this evening?

C: Spend on you  D: Spend on someone else